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## Willingness to Pay for Value-Added Solid Waste Management System among Cassava Processors in Nigeria

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### Abstract

Cassava (*Manihot esculenta* Crantz) is one of the most important staple food crops processed and consumed in different forms in Nigeria. Environmental pollution from solid waste increases with increasing production and processing of cassava. Past studies showed that over 55% of waste produced from cassava processing are disposed in dumping sites, creating both environmental pollution and negative health impact on the population in the neighborhood of cassava processing facilities. Improved waste management systems for making value-added products such as mushroom, feed and organic manure from cassava waste hold promise for environmental preservation and income generation for the smallholders. A survey of 403 cassava processing enterprises was carried out using structured questionnaires to identify different forms of cassava waste management systems and potential benefits to adopters of various forms of improved management systems. Descriptive statistics, contingent valuation and Logit model based on the cumulative probability function were used to determine the willingness of the processors to pay for improved waste management system and analyse the factors influencing processors' willingness to pay. Women constitute largest population of smallholder cassava processors and generate largest amount of cassava solid wastes. The mean willingness to pay for acquiring new knowledge on improved waste management technologies was US\$3/person. However, more than half of the respondents were willing to pay for acquiring new knowledge on the improved waste management, while other were on willing though they showed great level of interest in acquiring the new knowledge. It is expected that public expenditure to empower processors to use technologies for converting cassava solid wastes to value-added products will lead to lower cost and higher social benefits to the population (lower exposure to toxins and additional income to the smallholders, less pollution of the air, rivers and underground water, etc) compared to the current waste disposal methods.

**Keywords:** Cassava, pollution, smallholders, solid waste, value-added, willingness to pay